

REMARKS

Claims 1-3 and 5-11 are now pending in the application. Claims 1 and 8 are currently amended. Claim 4 is cancelled. No new matter has been added as all amendments are supported by the specification, claims, and drawings as originally filed. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

CLAIM OBJECTIONS

Claim 8 stands objected to for certain informalities. Applicant has amended claim 8 according to the Examiner's suggestions. Therefore, reconsideration and withdrawal of this objection are respectfully requested. Thus reconsideration and withdrawal of this objection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 112

Claim 8 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

Applicant has amended claim 8 to address this rejection. Therefore, reconsideration and withdrawal of this rejection are respectfully requested.

REJECTION UNDER 35 U.S.C. § 102

Claims 1 and 5-7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Chapman (U.S. Pat. No. 5,974,027). This rejection is respectfully traversed.

Applicant has amended claim 1. Claim 1 recites, among other things,

when protection is needed, switching each logic node from normal working mode to one of the other three working modes;
wherein in the passing working mode, the input protection bus of a logic node is connected to the output protection bus of the logic node;
in the bridging working mode, the input protection bus of a logic node is connected to the output working bus of the logic node; and
in the switching working mode, the input working bus of a logic node is connected to the output protection bus of the logic node.

Applicant submits that Chapman fails to anticipate the above limitations.

In the Office Action, the Examiner asserts that “[f]igure 2 shows a network in which a node is assigned an APS value that equivalent to a switching working mode, since the working path input of Node 3 is patched to the protection ring output (Column 6, lines 1-10).” Applicant respectfully traverses this assertion.

Column 6, lines 1-10 of Chapman reads

In FIG. 2 the working path 6 is broken in one direction only whilst the protection ring 7 remains intact as it resides in a separate fibre. Traffic is therefore bridged in both directions around the protection ring 7 as illustrated. Node 3 will set K3 to indicate ‘SF’ and ‘Long Path Enable’ which will be transferred together with the path trace onto the protection ring by virtue of the bridging action. Node 3 will recognise that the switch request on the protection ring was generated by itself as the path trace will be the same as that which it is transmitting.

Figure 2 and the above description at best appears to disclose that once the working path is broken, traffic uploaded from an adding end of Node 3 is bridged both directions around the protection ring 7 and the input of the working path 6 in Node 3 remains

connecting to a dropping end of Node 3. That is, in the mode illustrated in Fig. 2 of Chapman, the adding end of Node 3 connects to the outputs of the protection path 7 and the dropping end of Node 3 connects to the input of the working path 6, thus signals uploaded from the adding end of Node 3 are output to both the working path and the protection path; signals input from the working path 7 are dropped via the dropping end of Node 3.

In claim 1, when a node is working in a switching working mode, the input working bus of a logic node is connected to the output protection bus of the logic node, thus signals will be input from the protection channel and output to the working channel. Node C in Fig. 4 illustrates an example. The switching working mode of Node C relates to a service flow passing through Node C rather than a service flow added to/dropped from the ring network as shown in Fig.2 of Chapman. The connections inside Node C in a switching working mode are different from those inside Node 3 of Chapman.

Thus, the working mode illustrated in Fig 2 of Chapman is different from the switching working mode claimed in claim 1 of the present application.

In the Office Action, the Examiner further asserts that "[f]igure 3 shows a network in which a node is assigned an APS value that equivalent to a bridging working mode, as the protection ring input of Node 4 is connected to the protection ring output (Column 6, lines 11-20)." Applicant respectfully traverses this assertion.

Column 6, lines 11-20 of Chapman reads

"In FIG. 3, Node 4 recognises the incoming path trace as being the same as the expected value of its terminated traffic. Recognising the path trace from both sides of the ring it will assume that the direction of the working paths traffic is the preferable route (i.e. crosses the least number of

nodes) and select traffic from that direction. The K3 byte is set to indicate 'Reverse Request' and 'Long Path Disable' as traffic has been successfully selected from the short path. The Bridge performs in both directions around the ring as commanded by the received K3 bit 5."

Figure 3 and the above description at best disclose that once Node 4 recognizes the incoming path trace as being the same as the expected value of its terminated traffic, it will select traffic in the preferable route and uploaded its service to the protection ring in both of the directions. In other words, in the mode of Node 4 illustrated in Fig. 3, the dropping end connects to the input of the protection ring 7, and the adding end connects to the outputs of the protection ring 7. Thus, signals uploaded from the adding end of Node 4 are output to both the protection path and the working path; signals input from the protection path are dropped via the dropping end of Node 4.

In claim 1, when a node is working in a bridging working mode, in the bridging working mode, the input protection bus a logic node is connected to the output working bus of the logic node, thus signals will be input from the working channel and output to the protection channel. Node B in Fig. 4 illustrates an example. The bridging working mode of Node B relates to a service flow passing through Node B rather than a service flow added to/dropped from the ring network. The connections inside Node B in a switching working mode are different from those inside Node 4 of Chapman.

Thus, the working mode illustrated in Fig 3 of Chapman is different from the bridging working mode claimed in claim 1 of the present application.

In the Office Action, the Examiner further asserts that "[f]igure 5 shows a network in which a node is assigned an APS value that equivalent to a passing working mode,

as the protection ring input of Node 4 is connected to the working ring output (Column 6, lines 28-32)." Applicant respectfully traverses this assertion.

Column 6, lines 28-32 of Chapman reads

FIG. 5 shows that node 4 has disabled the bridge onto the long path due to the receipt of K3 bit 5 indicating a "disable". As can be seen the disabling of the bridge along the long path frees a portion of the ring off so that it can protect another path or carry low priority traffic.

Figure 5 and the above description at best disclose that in the mode of Node 4 illustrated in Fig. 5, the dropping end connects to the input of the protection ring 7, and the adding end connects to an output of the protection ring 7. Thus, signals uploaded from the adding end of Node 4 are output to both the protection path and the working path; signals input from the protection path are dropped via the dropping end of Node 4.

In claim 1, when a node is working in the passing working mode, the input protection bus a logic node is connected to the output protection bus of the logic node, thus signals will be input from the protection channel and output to the protection channel. Node A in Fig. 4 illustrates an example. The passing working mode of Node A also relates to a service flow passing through Node A rather than a service flow added to/dropped from the ring network. The connections inside Node A in a passing working mode are different from those inside Node 4 of Chapman.

Thus, the working mode illustrated in Fig 5 of Chapman is different from the passing working mode claimed in claim 1 of the present application.

In view of the forgoing, Applicant submits that claim 1 and its dependent claims 2-3 and 5-7 define over the art cited by the Examiner.

REJECTION UNDER 35 U.S.C. § 103

Claims 2-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chapman in view of Applicant's admitted prior art. Claims 8-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mochizuki in view of Chapman. These rejections are respectfully traversed.

Applicant submits that the arguments presented regarding claim 1 apply equally hereto. Applicant respectfully submits that Chapman and Mochizuki, individually or in combination, fail to teach or suggest the limitations of claim 1. Because claims 2-4 depend from claim 1, claims 2-4 also define over the art cited by the Examiner. Thus, Applicant respectfully requests withdrawal of the rejection on claims 2-4 under 35 U.S.C. § 103(a).

Similarly, Applicant respectfully submits that Chapman and Mochizuki, individually or in combination, fail to teach or suggest "a cross-connection panel configured to connect the input protection bus to the output protection bus if a passing working page is sent down; connect the input protection bus to the output working bus if a bridging working page is sent down; connect the input working bus to the output protection bus if a switching working page is sent down" as recited in claim 8.

In view of the foregoing, Applicant respectfully submits that independent claim 8 and its dependent claims 9-11 define over the art cited by the Examiner. Thus, Applicant respectfully requests withdrawal of the rejection on claims 2-4 and 8-11 under 35 U.S.C. § 103(a).

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0750, under Order No. 9896-000023/US/NP from which the undersigned is authorized to draw.

Dated: February 4, 2008

Respectfully submitted,

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